## PATENT ABSTRACTS OF JAPAN

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## (54) DISTORTION COMPENSATED AMPLIFIER

## (57) Abstract:

PROBLEM TO BE SOLVED: To eliminate the dispersion among respective amplifiers by shortening a control time of a vector adjustment device of the feedforward type distortion compensated amplifier that is used for a repeater and a base station of a mobile communication system to amplify multi-frequency signals in common.

SOLUTION: The amplitude and the phase of a vector adjustment device 2 in a distortion detection loop between directional couplers 1, 4 are changed by a prescribed amount and changes in the detection level of the loop output are compared sequentially in descending order of change so as to optimize the loop. Similarly, the amplitude and the phase of a vector adjustment device 7 in a distortion elimination loop between directional couplers 4, 9 are changed by a prescribed amount and changes in a detection pilot level of the loop output are compared sequentially in descending order of change so as to optimize the loop.

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